Hobbs, NM \$8241-1980 Distret 11 - (505) 748-1283 811 S. First Artesia, NM 88210 District III - (505) 334-6178 1000 Rio Brazos Road Aziec, NM 87410 District IV - (505) \$27-7131

TAPAA TATOVIPO Energy Minerals and Natural Resources/Department Oil Conservation Division

2040 South Pacheco Street

Santa Fe, New Mexico 87505 (505) 827-7131

SUBMIT ORIGINA

rom C-14

Revised 06/

PLUS 2 COPIE TO APPROPRIAT DISTRICT OFFIC

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APPLICATION FOR WELL WORKOVER PROJECT

l. Opera	Opera	tor and We	ell				CE	V		
		etroleum	Commo			111	1111 0 0	4000	OGRID I	Number
552	5 Hwy.	ecroream	i Compai	ny		μu	JUL 2 C	1999		
Fari	minaton	04 , NM 87	<b>4</b> 01						- T	
Contac	t Party	/ INI 0/	401		<del></del>	<del>MI</del>	1-600		∭ <sub>0</sub> 01	7654
	sy Cluga	ston				W/III	ALCOUNT E	(6)	Phone	500
Property Name							DUSUs Well Numl	, ·②)		-599-3454
San	Juan 29	-6 Unit					72A		API Num	ber -039-21344
UL_	Section	Township	Range	Feet From The	North/South Line	Feet	From The		Vest Line	
LF.	22	29N	6W	1450	North		620	Wes		County Rio Arriba
<u>   .</u>	Worko	ver				<del></del>		1	· · ·	L KIO ALLIDA
Date W	orkover Co	mmenced:	Previous	Producing Pool(s) (	Prior to Workover):		W		· · ·	
Date W	5/98 orkover Cor				·					
	5/98	npietea:	-,	_						
<u> </u>			Blan	co Mesaverde						
IV.	Auach	a description	on of the	Workover Proc	edures performe	ed to in	crease pro	oductio	n.	
IV.		- PIVALUL	JII UCLIIII	e cilive or mana	CROUNDS OF LOCAL					ior to the workover and at
V.			s of prod	luction following	the workover re-	flecting	a positive	produ	ection inc	teace
<u></u>					·	•	,	, p. 0 u c		icase.
	State of	New Me	exico	)						
	<b>.</b> .	_		) ss.						
i	County	of <u>San</u>	Juan	)						
	_Patsy	Clugsto	on,	being first duly s	worn, upon oath	states	s:			
	1.	i am me c	operator.	Or authorized re	presentative of	tha Or	aratar of	the sh	ova rafor	ongod Marii
			de, or ca	used to be mad	e. a diligent sea	rch of t	the produc	tion ro	cordo roc	enced Well. asonably available for this
	3.	To the bes	st of my	knowledge, this	application and t	he dat	a used to	nronor	o the	duction curve and/or table
		forthis We	ell are co	mplete and acci	urate	arc dat	a useu lo	hrebar	e me pro	duction curve and/or table
	\ /	1	1	1 -						
Signati	re	alse	< ("ll	ugim	Title Regulate	ì			D-4-	7/15/99
SUBSC	RIBED A	ND SWO	RN TO b	efore me this _	15th day of	Ory A			Date	
					A I	шА	<u>ب</u> عو	199	<b>-</b> '	
					L Li Oliv		are	$\alpha$ [		OFFICIAL SEAL
					Notary Pu		COULD 0	$\nu_{-}$		GILLIAN ARMENTA
My Con	nmission	expires:			Notary Pu	DHC		- 1	N KEE	NOTARY PUBLIC - NEW MEXICO otary Bond Filed with Secretary of State
		•						L	W	Y COMMISSION EXPIRES 10-249
FOR OII	L CONSER	RVATION D	IVISION	USE ONLY:	-					
VI.	<b>CERTIFI</b>	CATION C	F APPE	ROVAL:						
	This Application is hereby approved and the above reference to the contract of									
	This Application is hereby approved and the above-referenced well is designated a Well Workover Project and the Division hereby verifies the data shows a positive production increase. By application in the second control of the second control									
Division hereby verifies the data shows a positive production increase. By copy hereof, the Division notifies the Secretary of the Taxation and Revenue Department of this Approved and the Secretary of the Taxation and Revenue Department of this Approved and the Secretary of the Division notifies the										
	Secretary of the Taxation and Revenue Department of this Approval and certifies that this Well Workover Project was									
	-	<u></u>	- 1	<u> </u>						
Signature District Supervisor OCD District Date										
	•	`	(_'		UCD DISTINCT		,	Date	/ 1	
			_ プ	ノ(	1	- 5			8/4/0	39
					<del></del>				1-1-	/ )
∕II.	DATE OF	NOTIFICAT	TION TO	THE SECRETARY	OF THE TAVAT	1041 44	ID DC	.c. c.=-		
			. •		O THE IAMAI	IOIA W	יט אבעראנ	JE DEF	YARTMEN	IT:

Form 3160-5 (June 1990)		STATES NT OF THE INTERIOR	FORM APPROVED  Budget Bureau No. 1004-0135  Expires: March 31, 1993  5. Lease Designation and Serial No.		
	BUREAU OF	LAND MANAGEMENT			
	SUNDRY NOTICES A	ND REPORTS ON WELLS	SF-080377		
Do not use th	is form for proposals to drill  Use "APPLICATION FOR	6. If Indian, Allottee or Tribe Name			
	SUBMIT	7. If Unit of CA, Agreement Designation			
I. Type of Well Oil Well X	Gas Other		San Juan 29-6 Unit 8. Well Name and No.		
2. Name of Operato		SJ 29-6 Unit #72A			
	etroleum Company		9. API Well No.		
3. Address and Tele 5525 Highwa	phone No. <mark>ay 64, NBU 3004, Farming</mark>	ton, NM 87401 505-599-3454	30-039-21344		
4. Location of Well	(Footage, Sec., T., R., M., or Survey D	excription)	10. Field and Pool, or exploratory Area		
	50' FNL & 1620' FWL	•	Blanco Mesaverde		
Section 22,	, T29N. R6W		11. County or Parish, State		
			Rio Arriba, NM		
12. CHE	CK APPROPRIATE BOX(s	) TO INDICATE NATURE OF NOTICE, REPO	ORT, OR OTHER DATA		
TYPE	OF SUBMISSION	TYPE OF ACT	ION		
	Notice of Intent	Abandonment	Change of Plans		
[]		Recompletion	New Construction		
د لــــــــــــــــــــــــــــــــــــ	subsequent Report	Plugging Back	Non-Routine Fracturing		
$\Box$		Casing Repair	Water Shut-Off		
L_J	Final Abandonment Notice	· Altering Casing	Conversion to Injection		
		X Other Add pay and stimul	ate Dispose Water (Note: Report results of multiple completion ← Well Completion or Recompletion Report and Lee: + mi.)		
3. Describe Proposed or give subsurf	r Completed Operations (Clearly state all face locations and measured and true verti	pertinent details, and give pertinent dates, including estimated date of call depths for all markers and zones pertinent to this work.)*			
See attached Mesaverde fo		to add pay and stimulate the Lewis Shale	e interval in the existing		
			<u></u>		

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any Table, fictitious of the United States and Table, first the United States a

Signed

Approved by \_

Conditions of approval, if any

## San Juan 29-6 Unit #72A SF-080377; Unit F, 1450' FNL & 1620' FWL Section 22, T29N, R6W; Rio Arriba County, NM

Procedure used isolate and squeeze leak in casing and then perf & stimulate the Lewis Shale interval in the existing Mesaverde formation.

9/15/98

MIRU Big A #40. Killed well. ND WH & NU BOPs. COOH w/2-3/8" tubing. Clean out to PBTD. COOH. RIH w/4 ½" CIBP & set @ 4950'. Load hole & pressure test CIBP & casing to 500 psi bled back to 0. Established injection rate @ 1 bpm @ 500 psi. COOH. GIH & ran GR/CCL/CBL log from 4954' to 3510' (liner top) good bond from 4950 to 3820'. Logged under 250 psi from 3510 to surface. TOC – 2200'. Notified BLM & OCD of squeeze. GIH w/4-1/2" packer & set @ 4940'. PT and moved up hole to isolate leak. Found leak from 3752' – 3814'. RIH w/4-1/2" cement retainer & set @ 3630'.

RU BJ to squeeze. Pumped 50 sx Cl H cement w/3% CaCl2 mixed @ 16 ppg yield 1.18 ft3/sx (76 cf). Displaced w/8 bbls water. Pressure increased to 2000 + psi. Bleed down & sting out of retainer. Reversed out 6 bbls (28 cf) w/30 bbls water. Job complete @ 1743 hrs 9/16/98. COOH. WOC.

RIH w/3-7/8" bit & scraper & tagged retainer @ 3630'. Drilled out cement retainer & 170' good hard cement from 3630' - 3800'. PT casing and squeeze to 500 psi - 30 min. Good test. GIH & tagged CIBP @ 4950'. Circulated hole. COOH. RU to perf. Perf'd Lewis Shale interval @ 1 spf (.38" holes) 120 degree phased holes as follows: (Huerfanito Bentonite not present, equivalent stratigraphic depth is 4027').

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4740' - 4743' (3'); 4677' - 4680' (3'); 4600' - 4603' (3'); 4526' - 4529' (3'); 4479' - 4482' (3'); 4422' - 4425' (3'); 4358' - 4361' (3'); 4314' - 4317' (3'); 4282' - 4285' (3'); 4214' - 4217' (3') 4084' - 4087' (3'); 4049' - 4052' (3'); 36 Holes Total
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GIH w/4 ½" FBP & set @ 3877'. PT casing annulus & packer to 500 psi – OK. RU to Acidize Lewis Shale interval. Pumped 1000 gal of 15% HCL acid & ballsealers. Knocked balls off & COOH w/packer.

RIH & set 4 ½" packer @ 3541'. PT casing annulus & packer to 500 psi -OK. RU to frac Lewis Shale. Pumped 61,703 gal 60 Quality N2 30# X-link Borate foam w/198,820 = 20/40 Brady sand. Tagged with Iridium 192 radioactive tracer @ .447 mc/1000 total 89 millicuries. Total N2 – 880,000 scf, Total fluid to recover 743 bbls. ATP – 2400 psi; 45 bpm ATR. ISDP – 550 psi. Flowed back immediately on ¼" chokes for approx. 41 hours.

Released packer and COOH. RIH & cleaned out to CIBP @ 4950°. Drilled out CIBP and circulated hole & chased CIBP to 5606°. COOH. RIH w/2-3/8° 4.7# tubing and landed tubing @ 5500° with "F" nipple set @ 5467°. ND BOPs & NU WH. Pumped off exp. check. RD & released rig 9/25 98. Turned well over to production department.

3 MONTHS AFTER - WORK OVER 15 4 5 12 29-6 #72A Workover Production Increase Ξ 10 1 YEAR PRIOR PRODUCTION ဖ Ŋ က  $\alpha$ MCF/Month 3,000 4,000 8,000 7,000 000'9 2,000

16

MONTHS

API#	29-6 #72A	MCF/Month	
30-039-21344	1	3,169	
	2	3,289	
	3	3,156	
	4	3,428	
	5	3,173	
	6	2,740	
	7	2,465	
	8	2,075	
	g	2,561	
	10	2,218	
	11	3,301	
	12	2,669	
WORK OVER	<b>1</b> 3	2,285	
	14	7,234	
	15	6,442	
	16	5,404	

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